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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/027,490 | 12/21/2001 | Takamitsu Aoki | 393032029800 | 2061 |

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EXAMINER

JACOBSON, TONY M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2644

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/027,490 | AOKI ET AL. | |
| | Examiner | Art Unit | |
| | Tony M Jacobson | 2644 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 15 October 2004 has been entered.

Specification

2. The amendment filed 15 October 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: **Claim 8** recites "a first display device that displays a level of the sound signal at the first metering point on a first screen; and a second display device that displays a level of the sound signal at the second metering point on a second screen". Although the original specification recites "... a first display step of displaying a level of the sound at the first metering point on a first screen, and a second display step of displaying a level of the sound signal at the second metering point on a second screen ..." at page 2, line 33 –page 3, line 2 and equivalent language appears in original claim 4 (also at paragraph [0004] and claim 2 of

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Applicant's foreign priority document [as machine translated by JPO]), both the originally-filed disclosure of the instant application and the foreign priority document clearly indicate that the first and second "screens" are merely first and second sets of information, alternatively displayed by a single display device that is common to both sets of information (e.g., at page 10, line 20 –page 11, line 12 of the instant specification). Throughout the remainder of the original disclosure and the priority document the well-known term "window" is used to refer to each of these alternative sets of information displayed. As the term "screen", when used in connection with interactive computerized devices is commonly used to refer to distinct arrangements of graphical/visual information presented to a user (e.g., "If option X is selected, the Y screen will appear prompting the user to select Z.") Such use does not typically indicate that a physical display device "Y" suddenly appears in front of the user, but that the contents of a display device are updated to present a new set of graphical/visual information to a user. Accordingly, the claiming of a "second display device" in claim 8 constitutes new matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

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Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. **Claim 8** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As described above in the objection to the current amendment, the claiming of a "second display device" in claim 8 constitutes new matter. Therefore, the subject matter was not described in the specification in such a way as to enable one of ordinary skill in the art to make and use the invention as claimed. In the rejections that follow, the limitation "second display device" is interpreted as "display device".

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Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1, 3, 4, 6, and 8** are rejected under 35 U.S.C. 102(b) as being anticipated by Mackie Designs 8-bus Mixers ("Reference U" hereinafter).

7. Regarding **claim 6**, Reference U discloses in the system block diagram of pages 70-71 a signal processing apparatus comprising: a plurality of signal paths along which sound signals that are input are transmitted (input channels 1-16 [or 24 or 32] at top of page 70); a plurality of adjusting devices (filtering block comprising 75-Hz high-pass filter [HPF], "PARAMETRIC EQ", and "SHELVING EQ"; and CHAN[nel] FADER) that are arranged in series at a plurality of adjusting points on each of said plurality of signal paths, for adjusting at least one of sound volume ("CHAN FADER") and sound quality (filtering block) of a corresponding one of the input sound signals at the plurality of adjusting points on each of said plurality of signal paths along which the corresponding

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input signal is transmitted; a bus device (audio buses BUS1-BUS8; L-BUS, R-BUS; SOLO and AUX buses running vertically at the center of the diagram) that synthesizes the input sound signals that have been adjusted by said adjusting devices on said plurality of signal paths and outputted from said plurality of signal paths (the inherent normal function of an audio mixing bus); a condition determining device ("OL" block at top center of input channel portion of diagram) that is arranged on each of said plurality of signal paths, for determining whether the input sound signal satisfies a condition that a level of the sound signal exceeds a predetermined value at each of a plurality of metering points on each of said plurality of signal paths along which the corresponding input sound signal is transmitted (first full paragraph at page 5, "-20 AND OL LEDs"), wherein each of the adjusting points are arranged in between two adjacent ones of the plurality of metering points (The block diagram of page 70 shows that the metering points are taken at the input to the filtering block, the output of the filtering block, and the output of the channel fader block; and the adjusting devices [the filtering block and fader block are each arranged in between two adjacent ones of these metering points.); and an alarm display device ("OL" LED at top center of the input channel block diagram) that is arranged on each of said plurality of signal paths, for displaying an alarm when said condition determining device determines that the input sound signal satisfies the condition at [at] least one of the plurality of metering points on each of said plurality of signal paths (page 5, "-20 AND OL LEDs").

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8. Regarding **claim 1**, in normal operation, the signal processing apparatus of Reference U as described above regarding claim 6 performs a method comprising: an adjusting step of causing a plurality of adjusting devices that are arranged in series at a plurality of adjusting points on each of a plurality of signal paths along which sound signals that are input are transmitted to adjust at least one of sound volume ("CHAN FADER") and sound quality (filtering block) of a corresponding one of the input sound signals at the plurality of adjusting points on each of said plurality of signal paths along which the corresponding input signal is transmitted; a synthesizing step of causing a bus device (audio buses BUS1-BUS8; L-BUS, R-BUS; SOLO and AUX buses running vertically at the center of the diagram) that is connected to an output side of the plurality of signal paths, to synthesize the input sound signals that have been adjusted by said adjusting devices on said plurality of signal paths and outputted from the plurality of signal paths (the inherent normal function of an audio mixing bus); a condition determining step of determining whether the corresponding input sound signal satisfies a condition that a level of the corresponding input sound signal exceeds a predetermined value at each of a plurality of metering points on each of the plurality of signal paths along which the corresponding input sound signal is transmitted (first full paragraph at page 5, "-20 AND OL LEDs"), wherein each of the adjusting points are arranged in between two adjacent ones of the plurality of metering points (The block diagram of page 70 shows that the metering points are taken at the input to the filtering block, the output of the filtering block, and the output of the channel fader block; and the

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adjusting devices [the filtering block and fader block are each arranged in between two adjacent ones of these metering points.); and an alarm display step of causing an alarm display device ("OL" LED at top center of the input channel block diagram) that is arranged on each of the plurality of signal paths to displaying an alarm when said condition determining step determines that the input sound signal satisfies the condition at [at] least one of the plurality of metering points on each of said plurality of signal paths (page 5, "-20 AND OL LEDs").

9. Regarding **claim 3**, in the signal processing method of Reference U, as described above regarding claim 1, the plurality of signal paths transmit the input sound signals for a plurality of channels, respectively, and said plurality of metering points are provided on the signal path of each of the plurality of channels along which a corresponding one of the input signals is transmitted. (Duplicate input channels are not shown in detail, but are identical to the input channel block diagram shown in detail, as indicated by the text "INPUT 1 OF 16 [24] [32]" and the illustration of additional input blocks stacked behind the one shown in detail at the front, the numbers 16, 24, and 32 referring to the number of input channels in various mixer models.)

10. Regarding **claim 8**, Reference U discloses at page 49 that an optional meter bridge (shown near the center of page 71) is available for the Mackie 8-bus mixers, which provides a 12-LED bargraph meter for each input channel. A switch on the meter bridge allows switching between metering points at either the tape return inputs ("TAPE

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IN" on the input channel block diagram of page 70) or after the channel fader and MUTE switch, as shown on pages 70-71. Reference U also discloses at page 6, a "FLIP" switch that interchanges the roles of the MIC/LINE input of a channel with that of the TAPE IN input of the same channel so that when the FLIP switch is depressed, the TAPE IN input is processed through the filter/EQ block and input channel fader. In this mode of operation with the optional meter bridge installed, the input sound signal from the TAPE IN input for each channel is transmitted along one of a plurality of signal paths including a plurality of adjusting devices (75 Hz LPF, PARAMETRIC EQ, SHELVING EQ, and CHAN FADER) that are arranged in series at a plurality of adjusting points on each of said plurality of signal paths for adjusting at least one of sound volume and sound quality of the corresponding one of the input sound signals at the plurality of adjusting points on each of said plurality of signal paths along which the corresponding input signal is transmitted. The bus device synthesizes the input signals as claimed as described above regarding claim 6. A first metering point exists at the "FLIP" switch near the top left of page 70 and a second metering point exists at the output of the "MUTE" switch following the input channel fader, both of these metering points for each input channel being on the respective one of said plurality of signal paths along which the corresponding input sound signal is transmitted, and each of the adjusting points (75-Hz LPF, PARAMETRIC EQ, SHELVING EQ, and CHAN FADER) are arranged between two adjacent ones of the plurality of metering points. A condition determining device within the meter bridge on each of said plurality of signal paths (the level discriminating circuitry that is inherent to the LED meters of the meter bridge)

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determines whether the input signal exceeds a predetermined value at each of the plurality of metering points in each of the plurality of signal paths. The meter bridge display constitutes an alarm display device that is arranged on each of said plurality of signal-paths, for displaying an alarm (turning on a particular segment, such as the top-most segment, of the LED level display of the appropriate input channel) when said condition determining device determines that the input sound signal satisfies the condition at [at] least one of the plurality of metering points on each of said plurality of signal paths. The meter bridge constitutes a display device that displays a level of the sound signal at the first metering point on a first "screen" (a visual presentation of a first set of information, consistent with Applicant's specification and drawings) and displays a level of the sound signal at the second metering point on a second "screen" (a visual presentation of a second set of information), wherein when said condition determining device determines that the corresponding input sound signal satisfies the condition at the first metering point, said alarm display device displays the alarm on the first screen, and when said condition determining device determines that the corresponding input sound signal satisfies the condition at the second metering point, said alarm display device displays the alarm on the second screen. (In the same manner as disclosed by Applicant, the user selects which "screen" of information is presently viewable on the display device at any given time by operating the "GLOBAL SELECT" switch of the meter bridge.)

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11. Regarding **claim 4**, according to the description of Reference U regarding claim 8, the apparatus performs the method claimed in normal operation.

12. **Claim 5** is rejected under 35 U.S.C. 102(a) as being anticipated by Sony Digital Audio Mixer DMX-R100 ("Reference V" hereinafter).

13. Regarding **claim 5**, Reference V discloses an apparatus that operates under the control of a computer and in normal operation performs a method comprising an adjusting step of causing a plurality of adjusting devices ("TRIM", "FIL" [filter], "EQ" [equalizer], "DYN" [dynamics], "FADER" elements/block of the input channel portion of the block diagram of page 103) that are arranged in series at a plurality of adjusting points on each of a plurality of signal paths (although only one input channel is illustrated, 48 identical channels are present) along which sound signals that are input are transmitted to adjust at least one of sound volume ("TRIM" and "FADER") and sound quality ("FIL", "EQ", "DYN") of a corresponding one of the input sound signals at the plurality of adjusting points on each of said plurality of signal paths along which the corresponding input signal is transmitted; a synthesizing step of causing a bus device (audio buses PGM, SOLO, AUX, MTR running vertically at the center of the diagram of page 103) that is connected to an output side of the plurality of signal paths, to synthesize the input sound signals that have been adjusted by said adjusting devices on said plurality of signal paths and outputted from the plurality of signal paths (the inherent normal function of an audio mixing bus); a condition determining step of determining

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whether the corresponding input sound signal satisfies a condition that a level of the corresponding input sound signal exceeds a predetermined value at each of a plurality of metering points ("IN" [input], "PRE" [pre-fader], "PST" [post-fader]) on each of the plurality of signal paths along which the corresponding input sound signal is transmitted (control logic of "INPUT METER" of page 103 inherently determines whether the input sound signal exceeds a predetermined value at each of the plurality of metering points), wherein each of the adjusting points are arranged in between two adjacent ones of the plurality of metering points (The block diagram of page 103 shows that the adjusting devices ["TRIM", "FIL" (filter), "EQ" (equalizer), "DYN" (dynamics), "FADER"] are each arranged in between two adjacent ones of these metering points.); and an alarm display step of causing an alarm display device ("OVER" indicator at top each channel meter, as shown and described at page 11) that is arranged on each of the plurality of signal paths to displaying an alarm when said condition determining step determines that the input sound signal satisfies the condition at [at] least one of the plurality of metering points on each of said plurality of signal paths. As the mixer is completely digital, except analog input and output interfaces, all control and signal processing operations are performed by a computer comprising one or more processors executing a program. The computer program inherently must include modules for causing the steps disclosed to be performed; thus, an adjusting module, a synthesizing module, a condition determining module, and an alarm display module are inherently present, causing the disclosed steps to be performed.

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Response to Arguments

14. Applicant's arguments with respect to claims 1, 3, 4, 5, and 6 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Sony Digital Audio Mixing Console OXF-R3 Operation Manual ("Reference W") discloses a digital audio mixer with similar features to those of "Reference V" relied upon in the claim rejections above. While this particular version (V3) of the operating manual for the OXF-R3 (commonly known as the "Oxford") is dated after Applicant's priority date, earlier versions were sold and used in this country for several years prior to Applicant's invention.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony M Jacobson whose telephone number is 703-305-5532. The examiner can normally be reached on M-F 11:00-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh N Tran can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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February 14, 2005


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SUPERVISORY PATENT EXAMINER

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